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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/518,338	03/03/2000	Eugene H. Cloud	303.663US1	5591

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SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
P.O. BOX 2938  
MINNEAPOLIS, MN 55402

EXAMINER

NGUYEN, THAN VINH

ART UNIT	PAPER NUMBER
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2187

DATE MAILED: 03/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

*[Signature]*

## Office Action Summary

Application No.	09/578,338	Applicant(s)	Clouds Eugene
Examiner	Them Nguyen	Group Art Unit	2187

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

### Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication .
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

### Status

- Responsive to communication(s) filed on \_\_\_\_\_.
- This action is **FINAL**.
- Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

- Claim(s) 1-21 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- Claim(s) \_\_\_\_\_ is/are allowed.
- Claim(s) 1-21 is/are rejected.
- Claim(s) \_\_\_\_\_ is/are objected to.
- Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

### Application Papers

- See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.
- The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- The specification is objected to by the Examiner.
- The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119 (a)-(d)

- Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - All  Some\*  None of the CERTIFIED copies of the priority documents have been received.
  - received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
  - received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

### Attachment(s)

- Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_  Interview Summary, PTO-413
- Notice of References Cited, PTO-892  Notice of Informal Patent Application, PTO-152
- Notice of Draftsperson's Patent Drawing Review, PTO-948  Other \_\_\_\_\_

## Office Action Summary

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## **DETAILED ACTION**

1. Claims 1-21 are pending.

### ***Claim Objections***

2. Claims 15,16,20 are objected to because of the following informalities: Applicant uses the claim language "forming", which suggests the act of manufacturing. The Examiner suggests replacing "forming" with "providing" to better describe the claimed process/method. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1- are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Dye (USP 6,145,069).

As to claims 1,2,4-12,18-21:

Dye teaches the invention as claimed. Dye teaches a flash memory system and its method of operation having processor (MPU 400; Figure 3) a main memory (flash memory array 100; Figure 3); a cache memory connected to the main memory (SRAM cache/buffer 160, Figure 3;

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8/20-9/45); a compression (260; Figure 3) and decompression engine (280; Figure 3); an error detection and correction engine (220; Figure 3); and I/O buffer (SRAM cache/buffer 160 buffers input from bus 118).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3,15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dye (USP 6,145,069).

7. As to claims 3:

8. Dye does not specifically teach integrating every thing in the same chip. It is well-known in the art to integrate multiple devices onto a single chip to save space and costs. Thus, it would have been obvious to one of ordinary skills in the art at the time of the invention to integrate the memory device onto a single chip to save space and manufacturing costs.

9. As to claims 15-17:

10. Dye teaches a flash memory system and its method of operation having processor (MPU 400; Figure 3) a main memory (flash memory array 100; Figure 3); a cache memory connected to the main memory (SRAM cache/buffer 160, Figure 3; 8/20-9/45); a compression (260; Figure 3)

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and decompression engine (280; Figure 3); an error detection and correction engine (220; Figure 3); and I/O buffer (SRAM cache/buffer 160 buffers input from bus 118). Dye does not specifically teach integrating every thing in the same chip. It is well-known in the art to integrate multiple devices onto a single chip to save space and costs. Thus, it would have been obvious to one of ordinary skills in the art at the time of the invention to integrate the memory device onto a single chip to save space and manufacturing costs.

11. Claims 13-14 rejected under 35 U.S.C. 103(a) as being unpatentable over Dye (USP 6,145,069).

12. As to claims 13,14:

13. Dye does not specifically teach having a graphic/video control card connected to the memory device. However, he does suggests the use of such graphic device because he indicated that the data compression/decompression processor could be use for graphical compression and decompression. Thus, this suggests that the data input to the compression/decompression engine is a graphical device. Accordingly, it would have been obvious to one of ordinary skills in the art at the time of the invention to use advantageously use Dyes invention to compress and decompress data from a graphic device/control card, as suggested by Dye.

### *Conclusion*

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Than Nguyen whose telephone number is (703) 305-3866.

16. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9600.



Than Nguyen

March 8, 2002